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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,069	06/20/2003	Richard B. Sharpe	410782	5924

30955 7590 12/12/2006

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BOULDER, CO 80301

EXAMINER

SIDLER, DOROTHY S

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/600,069

Applicant(s)

SHARPE, RICHARD B.

Examiner

Dorothy Sarah Siedler

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 2 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6-20-03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This is the initial response to the application filed on June 20, 2003. Claims 1-14 are pending, and are considered below.

Claim Objections

Claim 5 is objected to because of the following informalities: Claim 5 is an exact replica of claim 4, and is therefore improper. The examiner considers this to be a typographical error, thus the applicant is encouraged to amend or cancel claim 5. Appropriate correction is required.

Claim 2 objected to because of the following informalities: Claim 2 recites the acronym "PCB", however this is a non-standard acronym in the electrical engineering art. Any non-standard acronym should be spelled out upon its first appearance in the claims, to avoid any confusion as to what it refers to. The examiner interprets "PCB" to mean a Printed Circuit Board, this interpretation used throughout the remainder of this office action. In addition, the word "batter" is misspelled, and should read "battery". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2626

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,10,11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Morris** (6,323,780) in view of **Evans** (5,995,451).

As per claim 1, **Morris** discloses a personal talking environmental status device (abstract) comprising:

Environmental sensor (column 3 line 48, Figure 1 item 20 *environmental condition sensor*), a voice synthesizer (column 2 line 15, *a synthesized voice can only be created through a voice synthesizer, therefore there must be a voice synthesizer*), battery (column 3 line 44), speaker (column 5 line 31), and microprocessor (column 4 line 16, Figure 1 item 30), the environmental sensor generating a signal indicative of an environmental characteristic (column 3 lines 54-63, *upon detection of an environmental condition, the sensor energizes an alarm unit*), the microprocessor processing the signal to instruct the voice synthesizer to emit sound from the speaker and audibly speak the environmental characteristic (column 2 lines 6-18).

However, **Morris** does not disclose a watertight enclosure. **Evans** discloses a watertight enclosure (column 3 lines 10-13 and Figure 1a). **Evans** discloses a processor based sensor system which is submerged, then used to gather data. **Morris** and **Evans** both disclose environmental status devices, which use sensors to gather information about the immediate environment.

Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to make a watertight enclosure in **Morris**, since it would protect the device against water damage, as indicated in **Evans** (column 3 line 10-13).

As per claim 2, **Morris** in view of **Evans** discloses the device of claim 1, and **Morris** further discloses the microprocessor, battery, and voice synthesizer being integrated with a PCB (column 5 lines 62-64, *the processor can augmented with hard wired circuits*).

As per claim 10, **Morris** in view of **Evans** discloses the device of claim 1, and **Morris** further discloses the sensor comprising a carbon monoxide sensor (column 3 line 50).

As per claim 11, **Morris** in view of **Evans** discloses the device of claim 1, however neither disclose the sensor comprising a radon sensor. However, radon is a radioactive noble gas and poses a significant health threat, just as carbon monoxide does.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a radon sensor, or any other dangerous gas sensor, in **Morris**, since it would enable detection of a harmful substance, preventing a possible health risk.

Art Unit: 2626

As per claim 13, **Morris** in view of **Evans** discloses the device of claim 1, and **Morris** further discloses the sensor automatically emitting the sound of the environmental characteristic at preset time intervals (column 7 lines 6-18 and Figures 3-7).

Claims 3-9,12,14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Morris** in view of **Evans** as applied to claim 1 above, and further in view of **Arpino** (4,295,139).

As per claim 3, **Morris** in view of **Evans** discloses the device of claim 1, however neither explicitly disclose an A/D converter for converting the signal into digital data for the microprocessor. **Arpino** discloses an A/D converter for converting the signal to digital data for the microprocessor (column 3 lines 24-28). **Morris**, **Evans** and **Arpino** all disclose processing systems that use sensors to gather and process environmental information.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use an A/D converter for converting the signal to digital data for the microprocessor in **Morris** and **Evans**, in order to convert the analog signal from the sensors into a digital signal to be processed by the microcontroller, as indicated in **Arpino** (column 3 lines 24-28).

As per claim 4 and 5, **Morris** in view of **Evans** discloses the device of claim 1, and **Morris** further discloses the sensor comprising one or more of a temperature (column 5

Art Unit: 2626

line 53). In addition, **Arpino** discloses temperature sensors (column 3 lines 3-16).

Neither **Morris, Evans** nor **Arpino** disclose a humidity sensor. However, **Arpino** gathers weather information, and indicates that additional weather information could be measured and analyzed (column 3 lines 19-22, Figure 1 item 20).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a humidity sensor in **Morris** and **Evans**, in order to gather additional information about real-time weather conditions which could affect a person performing any outdoor activity.

As per claim 6, **Morris** in view of **Evans** discloses the device of claim 1, however neither discloses the sensor comprising a barometric pressure sensor. **Arpino** discloses the sensor comprising a barometric pressure sensor (column 3 lines 3-16).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a barometric pressure sensor in **Morris** and **Evans**, in order to gather additional information about real-time weather conditions which could affect a person performing any outdoor activity.

As per claim 7, **Morris** in view of **Evans** discloses the device of claim 1, however neither disclose the sensor comprising a wind chill sensor. However, **Arpino** gathers weather information, and indicates that additional weather information could be measured and analyzed (column 3 lines 19-22, Figure 1 item 20).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a wind chill sensor in **Morris** and **Evans**, in order to gather additional information about real-time weather conditions which could affect a person performing any outdoor activity..

As per claim 8, **Morris** in view of **Evans** discloses the device of claim 1, however neither disclose the sensor comprising a wind speed sensor. **Arpino** discloses the sensor comprising a wind speed sensor (column 3 lines 3-16).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a wind speed sensor in **Morris** and **Evans**, in order to gather additional information about real-time weather conditions which could affect a person performing any outdoor activity.

As per claim 9, **Morris** in view of **Evans** discloses the device of claim 1, however neither disclose the sensor comprising a UV sensor. However, **Arpino** gathers weather information, and indicates that additional weather information could be measured and analyzed (column 3 lines 19-22, Figure 1 item 20).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a UV sensor in **Morris** and **Evans**, in order to gather additional information about real-time weather conditions which could affect a person performing any outdoor activity.

Art Unit: 2626

As per claim 12, **Morris** in view of **Evans** discloses the device of claim 1, however neither disclose the sensor comprising a dust particle sensor. However, **Arpino** gathers weather information, and indicates that additional weather information could be measured and analyzed (column 3 lines 19-22, Figure 1 item 20).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a dust particle sensor in **Morris** and **Evans**, in order to gather additional information about real-time weather conditions which could affect a person performing any outdoor activity.

As per claim 14, **Morris** in view of **Evans** discloses the device of claim 1, however neither disclose the sensor automatically emitting the sound of the environmental characteristic in response to pressing the button. **Arpino** discloses the sensor automatically emitting the sound of the environmental characteristic in response to pressing the button (column 5 lines 8-22).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have a sensor that sensor automatically emits the sound of the environmental characteristic in response to pressing the button in **Morris** and **Evans**, since it would enable the user to control the rate at which they want to receive an update on the environmental status, as indicated in **Arpino** (column 5 lines 8-22).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Amano (7,024,367) discloses a personal announcement device which measures biometric information.
- Scanlon (5,853,005) discloses a submersible acoustic monitoring system used to monitor acoustic signals, such as heartbeat, transferred through a liquid.
- Lemelson (4,428,685) discloses a hand-held device used to measure ambient conditions, such as temperature and atmospheric pressure.
- Lam (5,867,818) discloses a programmable speech synthesizer, which outputs a specific voice (performs an event) based on the input value.
- Sonderegger (6,043,917) discloses submerged acoustical sensors which are contained within a watertight container.

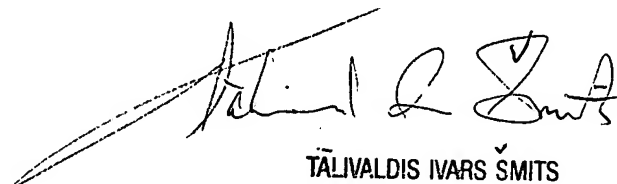
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dorothy Sarah Siedler whose telephone number is 571-270-1067. The examiner can normally be reached on Mon-Thur 9:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DSS.
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